Title: Closure for Retort Process Container Having a Peclable Seal Serial No.: 10/026,161

Dkt. No.: CG#1049

REMARKS/ARGUMENTS

Claims 2-9, 11-21, and 23-36 are pending in the application. Claims 5-9, 17-21, and 32-36 have been reinstated in the application with the Examiner's partial withdrawing of the restriction requirement in the previous Official Action. Claims 6, 18, 26, 27, 28 and 33 have been amended. Claims 1, 10 and 22 are canceled. Claims 24 and 25 are withdrawn.

- 1. The Examiner has rejected Claims 6, 18, and 33 under 35 USC § 112 as allegedly having insufficient antecedent basis for the claimed limitation in the claims. Applicants have amended these claims to provide appropriate antecedent basis and therefore respectfully request that the Examiner withdraw this rejection.
- 2. The Examiner has rejected Claims 4, 23, 26, 28 and 31 under 35 USC § 102(b) as being anticipated by <u>Ou-Yang</u> (US Patent No. 4,818,577). Applicant respectfully traverses the Examiner on this ground of rejection.

The instant invention in accordance with independent claims 26 and 28 is directed to a liner which fits within a closure and abuts the top interior surface thereof. The liner is made of material capable of being compressed to a thickness less than a resting thickness, which is defined as being the thickness of the liner at ambient temperature and pressure conditions, and is capable of recovering to a recovery thickness sufficient to allow the liner to maintain a positive pressure against the closure and a seal when the closure is affixed to a container. Moreover, as now claimed, the liner is a non-foamable

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> Serial No.: 10/026,161 Dkt. No.: CG#1049

material which provides a seal between a closure and a container when subjected to

sterilizing conditions in a retort process.

Ou-Yang teaches a liner for use with caps for containers which comprises a layer of compressible polymeric foam, a layer of adhesive in contact with and coextensive with the foam, and a layer of polymeric film in contact with and is coextensive with the layer of adhesive. Nowhere does Ou-Yang teach or remotely suggest the use of a non-foam liner as now claimed in the instant application, and in fact specifically teaches away from such a liner. Ou-Yang teaches a compressible polymeric foam liner. However, Applicants urge that foam materials are unsuitable for use in the instant invention.

Applicants have found bubbles in the foam material that expanded and broke, leaving the foam distorted when exposed to high temperatures and imprecise pressure controls i.e. retort processing. Ou-Yang teaches a polymeric foam which is used in combination with a polymeric film on an adhesive used to attach the film to the foam. Such a laminated construction is not usable in the instant invention. Thus, Applicants urge that the instant invention, as now claimed, is not taught nor suggested, much less anticipated by Ou-Yang and respectfully request that the Examiner withdraw this rejection.

3. The Examiner has rejected Claims 2, 3, 29 and 30 under 35 USC § 103(a) as being unpatentable over <u>Ou-Yang</u> in combination with <u>Markovich et al.</u> (US Patent No. 5,723,507). Applicants respectfully traverse the Examiner on this ground of rejection.

Claims 2, 3, 29 and 30 are dependent claims of independent claims 26 and 28 and therefore include all of the limitations thereof. Specifically, these dependent claims 2, 3,

Serial No.: 10/026,161 Dkt. No.: CG#1049

29 and 30 include the limitation that the liner is made from a material having a melting point greater than about 265° F and a shore a hardness value of about 70 or is made from a non-foamable material selected from the group consisting of a silicone-based material, urethane, latex, rubber, thermal plastic elastomers, thermal set elastomers or a combination there of. Neither Ou-Yang or Markovich et al. teach non-foamable liners. As pointed out previously, Ou-Yang teaches a closure liner including a polymeric foam adhesively secured to a polymeric film and Markovich et al. teaches gaskets which comprise at least one homogeneously branched ethylene polymer and at least one blowing agent. These blowing agents provide for a resulting foamed gasket material. As pointed out previously, the instant invention is directed to a non-foamed liner material which maintains its compressible integrity when subjected to retort processing conditions and such is not taught nor remotely suggested by either Ou-Yang or Markovich et al. either individually or in combination. Thus, Applicants urge that the instant invention, as now claimed, is not taught nor remotely suggested by this combination of references and respectfully request that the Examiner withdraw this rejection.

4. The Examiner has rejected Claims 5-8 and 32-35 under 35 USC § 103(a) as being unpatentable over <u>Ou-Yang</u> in view of <u>Montgomery et al.</u> (US Patent No. 5,009,323). Applicants respectfully traverse the Examiner on this ground of rejection.

Claims 5-8 and 32-35 are dependent claims depending from independent claims 26 and 28, respectively. As pointed out previously, independent claims 26 and 28 specifically include the limitation that the <u>liner is of a non-foamable material</u>. Claims 5-8 and 32-35 include further limitations of these independent claims wherein the

> Serial No.: 10/026,161 Dkt, No.: CG#1049

downwardly depending skirt of a closure includes a tamper evident or indicating band.

As discussed, Ou-Yang does not teach nor remotely suggest a non-foamable material which is capable of being compressed to a thickness less than a defined resting thickness and capable of recovery to a recovery thickness sufficient to allow the liner to maintain a positive pressure against a closure cap and against a seal when the closure is affixed to a container. In other words, a liner which can withstand retort processing. Thus, even though Montgomery et al. may teach a tamper indicating closure, Montgomery et al. does not correct the deficiencies of Ou-Yang in teaching a non-foamable liner which is capable of being subjected to retort processing. Thus, Applicants respectfully request that Examiner withdraw this rejection.

5. The Examiner has rejected Claims 9 and 35 under 35 USC § 103(a) as being unpatentable over <u>Ou-Yang</u> in view of <u>Kelly</u> (US Patent No. 6,202,871).

Applicants respectfully traverse the Examiner on this ground of rejection.

Claims 9 and 36 are dependent claims depending from independent claims 26 and 28, respectively. Specifically, Claims 9 and 35 include the limitation that the closure cap of the claimed invention includes at least one slit extending a pre-determined length on the top to the skirt of the closure.

Kelly is cited as allegedly teaching a vented beverage closure including slits extending a pre-determined length from the top to the skirt. However, this reference does not teach nor remotely suggest correcting the deficiencies of the Ou-Yang in teaching a liner made from a non-foamable material capable of being compressed to a thickness less than a defined resting thickness at ambient temperature and pressure conditions which is

that the Examiner withdraw this rejection.

Title: Closure for Retort Process Container Having a Peelable Seal

Serial No.: 10/026,161

Dkt. No.: CG#1049

capable of recovering to a recovery thickness sufficient to allow the liner to maintain a positive pressure against a cap or closure and against a seal when a closure is affixed to a container. Thus, Applicants urge that the combination of <u>Ou-Yang</u> with <u>Kelly</u> does not teach nor remotely suggest the instant invention, as now claimed, and respectfully request

6. The Examiner has rejected Claims 11, 12, 16 and 27 under 35 USC § 102(b) as being anticipated by or alternatively under 35 USC § 103(a) as being obvious over Ou-Yang. Applicants respectfully traverse the Examiner on this ground of rejection.

Claim 27 is an independent claim directed to a closure in combination with a container wherein a liner is proportioned to fit firmly within the closure and abuts a top interior surface thereof. The liner is made from a material capable of being compressed to a thickness less than a resting thickness at ambient temperature and pressure conditions and is capable of recovering to this resting thickness which is sufficient to allow the liner to maintain a positive pressure against a closure cap and against a seal when the cap is affixed to a container. Particularly, the liner is a non-foamable material. Claims 11, 12, and 16 are dependent claims of Claim 27.

As pointed out previously, <u>Ou-Yang</u> teaches a liner suitable for use with caps for containers and <u>comprises a layer of compressible polymeric foam</u>, a layer of adhesive in contact with and coextensive with the foam layer and a layer of polymeric film in contact with and coextensive with the layer of adhesive. The teaching of a polymeric foam in a liner does not in any way teach or remotely suggest a non-foamable liner, as now claimed in the instant application. Moreover, Applicants submit that foamable materials were

Title: Closure for Retort Process Container

Having a Peelable Seal Serial No.: 10/026,161

Dkt. No.: CG#1049

found unacceptable for retort processing since bubbles were formed in the foam material

and the gas in the bubbles expanded during the retort processing thereby breaking the

bubbles or leaving the foam distorted when exposed to high temperatures and imprecise

pressure controls. Thus, Applicants urge that Ou-Yang does not teach nor remotely

suggest, much less anticipate the instant invention in accordance with independent Claim

27 and claims 11, 12, and 16 depending therefrom. Therefore, Applicants respectfully

request that the Examiner withdraw this rejection.

7. The Examiner has rejected Claims 13-15 under 35 USC § 103(a) as being

unpatentable over Ou-Yang. Applicants respectfully traverse the Examiner on this

ground of rejection.

Claims 13-15 are dependent claims of Claim 27 setting forth specifically the

angle of an interior thread affixed to a skirt interior surface of a closure. However,

Claims 13-15 include all of the limitations of Claim 27, specifically the limitation that the

liner is made from a non-formable material which is not taught nor remotely suggested by

Ou-Yang. Thus, Applicants urge that since Ou-Yang does not teach nor remotely suggest

the type of material used in the liner even if Ou-Yang teaches the thread angle affixed to

the inner surface of the cap closure, such does not remotely suggest a teaching or

suggestion of depending Claims 13-15. Thus, Applicants respectfully request that the

Examiner withdraw this rejection of Claims 13-15.

8. The Examiner has rejected Claims 17-20 under 35 USC § 103(a) as being

15

Serial No.: 10/026,161 Dkt. No.: CG#1049

unpatentable over Ou-Yang in combination with Montgomery. Applicants respectfully

traverse the Examiner on this ground of rejection.

Claims 17-20 are dependent claims of independent Claim 27 and are specifically directed to the inclusion of a tamper evident band depending from a closure skirt.

However, Claims 17-20 include all of the limitations of Claim 27 and particularly the claimed liner, which is a non-foamable material. Thus, since Ou-Yang does not teach the specific liner of the instant invention, as now claimed and noted previously, Montgomery does not correct this deficiency. Thus, Applicants submit that the instant invention in accordance with Claims 17-20 are not taught by the combination of Ou-Yang with Montgomery and respectfully request that the Examiner withdraw this rejection.

9. The Examiner has rejected Claim 21 under 35 USC § 103(a) as being unpatentable over Ou-Yang in view of Kelly. Applicants respectfully traverse the Examiner on this ground of rejection.

Claim 21 is a dependent claim of independent Claim 27 specifically including at least one slit extending a pre-determined length from the top of a closure cap to a closure skirt. However, since Claim 21 includes all of the limitations of Claim 27 and since Ou-Yang neither independently nor in combination with Kelly teach the specific liner of Claim 27 which includes a non-foamable material which upon subjection to retort processing returns to its original resting thickness, then the instant invention of dependent Claim 21 is also not taught. Thus, Applicants respectfully request that the Examiner withdraw this rejection.

Title: Closure for Retort Process Container

Having a Peclable Seal Serial No.: 10/026,161

Dkt. No.: CG#1049

The Examiner has noted several other references as being of interest but not relied upon. Applicants have reviewed these prior art references and have determined that none of these references add nor disclose teachings more relevant than the references which have been previously discussed herein. Therefore, further discussion of these additional references does not appear to be warranted.

Applicants' urge that the instant application is now in condition for allowance.

However, if the Examiner believes there are other unresolved issues in this case,

Applicant's Attorney would appreciate a call at (502) 584-1135 to discuss such remaining issues.

Respectfully submitted,

Dated: 113/05

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